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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,086	06/24/2004	Keiichi Akagawa	04269/LH	5875
1933	7590	02/14/2005	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 767 THIRD AVENUE 25TH FLOOR NEW YORK, NY 10017-2023			KIANNI, KAVEH C	
			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/500,086	<b>Applicant(s)</b> AKAGAWA ET AL.	
	<b>Examiner</b> Kianni C Kaveh	<b>Art Unit</b> 2833	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-34 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

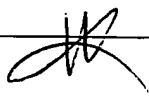
**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3</u> .   | 6) <input type="checkbox"/> Other: _____                                    |



## **DETAILED ACTION**

### ***Election/Restrictions***

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

I) claims 1-3, 12-14, 25 and 28

II) claim 4

III) claims 5-8

IV) claims 9-14

V) claims 15-21

VI) claims 22-24

VIII) claims 29 and 31

IX) claims 32 and 34

X) claims 33 and 34

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Group invention I, claims 1-3, 12-14, 25 and 28 are directed to the first positions of the one or more mirrors are advanced positions with respect to the one or more mirror receiving recesses, and so that the second positions of the one or more mirrors are retracted positions with respect to the one or more mirror receiving recesses, first alignment marks which are used to align the light guide substrate and the actuator substrate are formed on the light guide substrate, and second alignment marks which are used to align the light guide substrate and the actuator substrate are formed on the actuator substrate,

Group invention II, claims are directed to including the second positions of the one or more mirrors are retracted positions with respect to the one or more mirror receiving recesses; which is characterized in that the supply of electric power to the actuator substrate is performed directly to the actuator substrate from the outside,

Group invention III, claims 5-8 are directed to device comprises a relay substrate which is used to relay electrical connections with respect to the actuator substrate, the relay substrate is joined to the other surface of the actuator substrate so that a portion of this relay substrate protrudes from the actuator substrate, and the relay substrate does not cover the regions on this other surface of the actuator substrate corresponding to the second alignment marks,

Group invention IV, claims 9-14 are directed to actuator substrate comprises a plurality of feed terminals used for the electrical driving of the actuators, and one or more terminals of a first type used to perform feeding for the purpose of individually driving the actuators, and one or more terminals of a second type used to perform feeding for the purpose of collectively driving all of the actuators so that all of the one or more mirrors are positioned in the second positions, are included in the plurality of feed terminals,

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Group invention V, claims 15-21 are directed to including a relay substrate which is used to relay electrical connections to the actuator substrate; which is characterized in that the light guide substrate and the actuator substrate are aligned and joined so that the first positions of the one or more mirrors are advanced positions with respect to the one or more mirror receiving recesses, and so that the second positions of the one or more mirrors are retracted positions with respect to the one or more mirror receiving recesses, and the relay substrate is joined to the other surface of the actuator substrate so that a portion of this relay substrate protrudes from the actuator substrate

Group invention VI, claims 22-24 are directed to including the light guide substrate and the actuator substrate are joined with a spacer interposed so that the second positions of the one or more mirrors are positions in which the mirrors are completely retracted from the one or more mirror receiving recesses,

Group invention VII, claims 26-28 are directed to including a step of preparing a spacer that is joined between the light guide substrate and the actuator substrate; a spacer joining step in which the spacer is joined to either the light guide substrate or the actuator substrate,

Group invention VIII, claims 29 and 31 are directed to including actuators are constructed so that when absolutely no signals are supplied, the mirrors supported on these actuators return to specified positions that are farther from the actuator substrate on the first surface of this substrate than the second positions, and when the light guide substrate and the actuator substrate are aligned, specified signals are applied to the actuator substrate, so that all of the one or more mirrors are positioned in the second positions

Group invention IX, claims 32 and 34 are directed to including adjustment of the amount of transmitted light of light beams that are propagated through light guides by inserting and removing insertion plates into and from slits formed in these light guides,

Group invention X, claims 33-34 are directed to including

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the region can transmit light of a specified wavelength, this light of a specified wavelength is caused to be incident from either the first region or second region, and the reflected light is emitted from the first region or second region, so that the insertion positions of the insertion plates inside the slits can be observed by microscopic observation

The following claim(s) are generic: none.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

One/Each group of the inventions I-X has at least one technical feature that other groups do not have and other groups of inventions have at least one technical feature that the former lacks. As stated above each group shows at least one technical feature that other groups do not have and visa versa. For instance Group invention I, are directed to technical feature consisting of 'the first positions of the one or more mirrors are advanced positions with respect to the one or more mirror receiving recesses, and so that the second positions of the one or more mirrors are retracted positions with respect to the one or more mirror receiving recesses, first alignment marks which are used to align the light guide substrate and the actuator substrate are formed on the light guide substrate, and second alignment marks which are used to align the light guide substrate and the actuator substrate are formed on the actuator substrate' in which other group of inventions fail to meet and that other group of inventions such as Group Invention II directed to technical feature consisting of 'the second positions of the one or more mirrors are retracted positions with respect to the one or more mirror receiving recesses; which is characterized in that the supply of electric power to the actuator substrate is performed directly to the actuator substrate from the outside' in which Group Invention I or other Group Inventions lack to teach. Thus, each group of inventions require a separate search that that of other inventions.

A telephone call was made to Mr. Holtz on 2/1/05 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

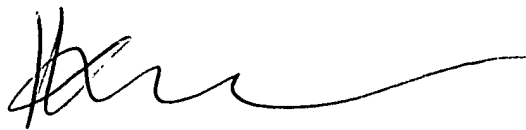
or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kianni C Kaveh whose telephone number is 571-272-2417. The examiner can normally be reached on 9:30-19:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 8, 2005

A handwritten signature in black ink, appearing to be 'K. Kaveh', with a long horizontal flourish extending to the right.